

DETAILED ACTION

1. **Claims 47, 48, 51-53 and 56 have been examined and are pending.**
2. **Claims 1-46, 49, 50, 54, 55, 57 and 58 are cancelled.**
3. **No new claims are presented.**
4. **Applicant's amendments necessitate a new ground(s) of rejection.**

Accordingly, this Office action is made FINAL.

Response to Arguments

5. Applicant's arguments, see pages 10 and 11, filed 5/26/2011, with respect to the rejection of Claims 47 and 52 under 35 U.S.C. 112 have been fully considered and are persuasive. **The rejection of Claims 47 and 52 under 35 U.S.C. 112 has been withdrawn.**

6. Examiner thanks Applicant for clarifying claim terms. Applicant has supplied three references used to describe claim terms. These references include "RenderingControl:1 Service Template Version 1.01", "UPnP AV Architecture:0.83" and "AVTransport:1 Service Template Version 1.01", all published in 2002 in the United States. All three references qualify as prior-art. In making claim amendments using parts of these definitions to support disclosure, Applicant appears to incorporate definitions from these documents by reference as being inherent features in Applicant's UPnP architecture since the express definitions do not appear in Applicant's disclosure. Examiner will construe the claims in light of the supplied definitions based on inherency, but also will apply these references as Applicant has. In other words, the UPnP

architectures disclosed by the combination of Runkis and Weast also inherently include the definitions Applicant is relying on.

7. Applicant's prior-art arguments with respect to claims 47, 48, 51-53 and 56 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 47, 48, 51-53 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/0243700 A1 (Weast), and further in view of US 2003/0046338 A1 (Runkis), and Applicant-supplied non-patent literature (three publications) entitled "AVTransport:1 Service Template Version 1.01", "UPnP AV Architecture:0.83" and "RenderingControl:1 Service Template Version 1.01" all published in 2002, collectively referred to as (UPnP).

As to Claims 47 and 52, Weast discloses a method, and apparatus, respectively, for controlling content playback related information in a network including a server, a playing device, and at least one control device, the at least one control device being used for controlling the server and the playing device (Weast discloses the server, control point, renderer - ¶ [0020]), the server and the playing device configured in either a push mode or a pull mode (Weast discloses the push and pull modes equivalent to

what Applicant calls the different and same location modes - ¶ [0052]), the method being performed by the at least one control device and comprising:

matching a protocol and a data format between the server and the playing device, the server and the playing device configured in pull mode (Weast discloses the discovery process that the control point uses to determine compatible servers and renderers - ¶¶ [0053, 0066, 0097, 0098; Weast discloses that the control point controls the transfer of information between itself, the server and renderer such that it operates in either the push or pull mode wherein the control point either sets the state on the server to push the media to the renderer, or instructs the renderer to pull the information from the server to be used for rendering - ¶¶ [0052, 0047 and 0060]; and Figure 1, elements 102, 104, 106, 142, 144 and 146; Weast discloses controlling rendering using sound volume information - ¶ [0086]; Weast discloses the separate control information and stream paths - Figure 1, elements 142, 144 and 146 and associated text);

requesting the playing device matched with the server in the protocol and the data format to receive and render media content streamed from the server (Weast discloses that the control point controls the transfer of information between itself, the server and renderer such that it operates in either the push or pull mode wherein the control point either sets the state on the server to push the media to the renderer, or instructs the renderer to pull the information from the server to be used for rendering - ¶¶ [0052, 0047 and 0060]; and Figure 1, elements 102, 104, 106, 142, 144 and 146; Weast discloses controlling rendering using sound volume information - ¶ [0086]),

wherein when the server and the playing device are configured in the pull mode, both the AV transport service and the rendering control service are executed by the playing device (Weast discloses that the control point controls the transfer of information between itself, the server and renderer such that it operates in either the push or pull mode wherein the control point either sets the state on the server to push the media to the renderer, or instructs the renderer to pull the information from the server to be used for rendering – ¶¶ [0052, 0047 and 0060]; and Figure 1, elements 102, 104, 106, 142, 144 and 146; Weast discloses controlling rendering using sound volume information - ¶ [0086]);

requesting the server to store in the server, the transport state information transmitted from the playing device to the at least one control device, and the rendering information including the video and/or audio characteristic value of the playing device transmitted from the playing device to the at least one control device (Weast discloses the request by the control point to the server for the server to provide the media contents to the renderer - ¶ [0052]; and discloses the push and pull modes equivalent to what Applicant calls the different and same location modes - ¶¶ [0052 and 0060]; Weast discloses that the control point controls the transfer of information between itself, the server and renderer such that it operates in either the push or pull mode wherein the control point either sets the state on the server to push the media to the renderer, or instructs the renderer to pull the information from the server to be used for rendering – ¶¶ [0052, 0047 and 0060]; and Figure 1, elements 102, 104, 106, 142, 144 and 146; Weast discloses controlling rendering using sound volume information - ¶ [0086]),

transmitting a second command including the stored rendering information received from the server to the playing device to set the playing device with the stored rendering information included in the second command (Weast discloses that the control point controls the transfer of information between itself, the server and renderer such that it operates in either the push or pull mode wherein the control point either sets the state on the server to push the media to the renderer, or instructs the renderer to pull the information from the server to be used for rendering – ¶¶ [0052, 0047 and 0060]; and Figure 1, elements 102, 104, 106, 142, 144 and 146; Weast discloses controlling rendering using sound volume information - ¶ [0086]).

Weast does not disclose wherein the transport state information is associated with an audio/video (AV) transport service and the AV transport service is used for controlling a transport flow of the media content; and according to the set transport state information such that the media content is transported from the paused part of the media content indicated by the transport flow status included in the transport state information However Runkis discloses

wherein the transport state information is associated with an audio/video (AV) transport service and the AV transport service is used for controlling a transport flow of the media content (Runkis, Page 7, ¶ [0078] discloses the user requesting to continue playback of a movie which includes the rendering state of where the user stopped watching previously and data content control of where to restart the audio and video playback content services, the resumption information being audio and visual characteristics of playback);

according to the set transport state information such that the media content is transported from the paused part of the media content indicated by the transport flow status included in the transport state information (Runkis, Page 7, ¶ [0078] discloses the user requesting to continue playback of a movie which includes the rendering state of where the user stopped watching previously and data content control of where to restart the audio and video playback content services, the resumption information being audio and visual characteristics of playback).

It would have been obvious to one of ordinary skill in the art to combine wherein the transport state information is associated with an audio/video (AV) transport service and the AV transport service is used for controlling a transport flow of the media content; and according to the set transport state information such that the media content is transported from the paused part of the media content indicated by the transport flow status included in the transport state information, taught by Runkis, with with controlling content playback related information in a network including a server, a playing device, and a controller, the controller being used for controlling the server and the playing device taught by Weast, in order to allow a user to resume playback of media from where they left off instead of having to restart and search for where they left off (Runkis - ¶ [0159]).

The combination of Weast and Runkis further discloses

wherein the at least one control device performs a resuming playback operation from a paused part of the paused media content when playback of the paused media content is resumed by the playing device (Runkis, Page 7, ¶ [0078] discloses the user

requesting to continue playback of a movie which includes the rendering state of where the user stopped watching previously and data content control of where to restart the audio and video playback content services, the resumption information being audio and visual characteristics of playback; Weast discloses that the control point controls the transfer of information between itself, the server and renderer such that it operates in either the push or pull mode wherein the control point either sets the state on the server to push the media to the renderer, or instructs the renderer to pull the information from the server to be used for rendering – ¶¶ [0052, 0047 and 0060]; and Figure 1, elements 102, 104, 106, 142, 144 and 146; Weast discloses controlling rendering using sound volume information - ¶ [0086]; Weast discloses controlling rendering using sound volume information - ¶ [0086]; Runkis, at ¶ [0078] discloses a service being capable of storing the state of playback, and retrieving and rendering at a different location from the point in the rendering where playback was interrupted; ¶ [0078] discloses the rendering state being captured for the restart of rendering at another location. ¶ [0049] discloses the use of multiple PANO objects which are a superobject encompassing both software and hardware. ¶ [0065] discloses that the PANO monitors, controls and regulates data transfers across a network. ¶ [0073] discloses that the server in this PANO network is the central controller's database, wherein the user's preference codes are transferred as an input argument to the central controller. ¶ [0072] discloses user-generated data files being stored in a non-volatile storage medium. ¶¶ [0078 and 0097] disclose that a PANO {which can be playing device} sends user-generated data among other PANO's for purposes of controlling the user's "programming" such as the

resumption information being audio and visual characteristics of playback; ¶¶ [0073-0074] disclose the request signal; Runkis, Page 7, ¶ [0078] discloses the user requesting to continue playback of a movie which includes the rendering state of where the user stopped watching previously and data content control of where to restart the audio and video playback content services, the resumption information being audio and visual characteristics of playback),

wherein the resuming playback operation comprises:

receiving the stored transport state information and the stored rendering information from the server (Runkis, Page 7, ¶ [0078] discloses the user requesting to continue playback of a movie which includes the rendering state of where the user stopped watching previously and data content control of where to restart the audio and video playback content services, the resumption information being audio and visual characteristics of playback; Weast discloses that the control point controls the transfer of information between itself, the server and renderer such that it operates in either the push or pull mode wherein the control point either sets the state on the server to push the media to the renderer, or instructs the renderer to pull the information from the server to be used for rendering – ¶¶ [0052, 0047 and 0060]; and Figure 1, elements 102, 104, 106, 142, 144 and 146; Weast discloses controlling rendering using sound volume information - ¶ [0086]);

transmitting a first command including the stored transport state information received from the server to the playing device to set the playing device with the stored transport state information included in the first command (Runkis, Page 7, ¶ [0078]

discloses the user requesting to continue playback of a movie which includes the rendering state of where the user stopped watching previously and data content control of where to restart the audio and video playback content services, the resumption information being audio and visual characteristics of playback; Weast discloses that the control point controls the transfer of information between itself, the server and renderer such that it operates in either the push or pull mode wherein the control point either sets the state on the server to push the media to the renderer, or instructs the renderer to pull the information from the server to be used for rendering – ¶¶ [0052, 0047 and 0060]; and Figure 1, elements 102, 104, 106, 142, 144 and 146; Weast discloses controlling rendering using sound volume information - ¶ [0086]).

The combination of Weast and Runkis discloses UPnP, but does not explicitly disclose its inherent features including: wherein the rendering state information is associated with a rendering control service, the rendering control service for controlling a dynamically configurable video and/or audio characteristic of the playing device. However UPnP discloses

wherein the rendering state information is associated with a rendering control service, the rendering control service for controlling a dynamically configurable video and/or audio characteristic of the playing device (UPnP, RenderingControl:1 Service Template Version 1.01 discloses dynamically configurable attributes that affect how the content is rendered including video brightness, contrast and audio volume, balance, equalization, etc. in a control point control architecture the same as the Weast reference

– Page 6, section 1.1; Page 22, sections 2.4.3 and 2.4.4; page 36, sections 2.4.31 and 2.4.32; and page 41, sections 2.5.3 and 2.5.4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine UPnP's inherent features including: wherein the rendering state information is associated with a rendering control service, the rendering control service for controlling a dynamically configurable video and/or audio characteristic of the playing device taught by UPnP, with Control Point controlled UPnP media management taught by the combination of Weast and Runkis, because as Applicant points out, these features are inherent in UPnP rendering devices (UPnP, RenderingControl:1 Service Template Version 1.01 – Page 6, section 1.1).

The combination of Weast, Runkis and UPnP further discloses set rendering state information (UPnP, RenderingControl:1 Service Template Version 1.01 discloses dynamically configurable attributes that affect how the content is rendered including video brightness, contrast and audio volume, balance, equalization, etc. in a control point control architecture the same as the Weast reference – Page 6, section 1.1; Page 22, sections 2.4.3 and 2.4.4; page 36, sections 2.4.31 and 2.4.32; and page 41, sections 2.5.3 and 2.5.4);

transmitting, when playback of the media content by the playing device is paused, a request to the playing device to transmit the transport state information and the rendering state information, the transport state information including a transport flow status of the media content at the time of pausing the media content, and the rendering state information including a video and/or audio characteristic value of the playing

device at the time of pausing the media content (UPnP, RenderingControl:1 Service Template Version 1.01 discloses dynamically configurable attributes that affect how the content is rendered including video brightness, contrast and audio volume, balance, equalization, etc. in a control point control architecture the same as the Weast reference – Page 6, section 1.1; Page 22, sections 2.4.3 and 2.4.4; page 36, sections 2.4.31 and 2.4.32; and page 41, sections 2.5.3 and 2.5.4; Weast discloses that the control point controls the transfer of information between itself, the server and renderer such that it operates in either the push or pull mode wherein the control point either sets the state on the server to push the media to the renderer, or instructs the renderer to pull the information from the server to be used for rendering – ¶¶ [0052, 0047 and 0060]; and Figure 1, elements 102, 104, 106, 142, 144 and 146; Runkis discloses the user of a playback device pausing playback and storing AVTransport and rendering state information to the central database, later used to send back to the playback via the controller such that the user may resume AVTransport and rendering state values to resume using the file/media - ¶¶ [0072, 0073, 0078, 0079, 0160, 0162, 0164]; and

wherein the media content is transported from the server to the playing device and is rendered in the playing device is rendered in the playing device according to the rendering information such that the playing device renders the transported media content using the stored video and/or audio characteristic value of the playing device included in the rendering state information (Weast discloses that the control point controls the transfer of information between itself, the server and renderer such that it operates in either the push or pull mode wherein the control point either sets the state

on the server to push the media to the renderer, or instructs the renderer to pull the information from the server to be used for rendering – ¶¶ [0052, 0047 and 0060]; and Figure 1, elements 102, 104, 106, 142, 144 and 146; Weast discloses controlling rendering using sound volume information - ¶ [0086]).

As to Claim 48, the combination of Weast, Runkis and UPnP discloses the method of claim 47, further comprising

comparing the protocol and the data format between the playing device and the server to prepare a connection between the playing device and the server (Weast discloses the discovery process that the control point uses to determine compatible servers and renderers - ¶¶ [0053, 0066, 0097, 0098]).

As to Claim 51, the combination of Weast, Runkis and UPnP discloses the method of claim 47,

wherein the transport state information and rendering state information are stored in the server with identification information for identifying the stored transport information and rendering state information (Runkis at ¶ [0072] discloses user-generated data files being stored in a non-volatile storage medium identifying the user by virtue of being user-generated).

The motivation and obviousness arguments are the same as in Claim 47.

As to Claim 53, the combination of Weast, Runkis and UPnP discloses the apparatus of claim 52,

wherein the protocol and the data format between the playing device and the server are compared to prepare a connection between the playing device and the server (Weast discloses the discovery process that the control point uses to determine compatible servers and renderers - ¶¶ [0053, 0066, 0097, 0098]).

As to Claim 56, the combination of Weast, Runkis and UPnP discloses the apparatus of claim 52,

wherein the transport information and rendering state information are stored in the server with identification information for identifying the stored transport state information and rendering state information (Runkis at ¶ [0072] discloses user-generated data files being stored in a non-volatile storage medium identifying the user by virtue of being user-generated).

The motivation and obviousness arguments are the same as in Claim 47.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD G. KEEHN whose telephone number is (571)270-5007. The examiner can normally be reached on Monday through Friday, 9am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharja can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RGK

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